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Mplus VERSION 8.3
MUTHEN & MUTHEN
06/29/2020   2:51 PM

INPUT INSTRUCTIONS

  Title: Reliability estimation after parceling, for composite with
  categorical items (Raykov procedure)
  England

  Data: file = EnglandParceling.dat;

  Variable: names = TC1 TC2 TC3 TC4 TC5 TC6 TC7 TC8 TC9 TC10 TC11 TC12 TC13 TC14
TC15;
            names = NEW1 NEW2 NEW3;
            usevariables = NEW1-NEW3;
            missing = all(999);

  Analysis: estimator = MLR;

  Model:  F1 by NEW1*(P1)
          NEW2-NEW3 (P2-P3);
          NEW1-NEW3 (P4-P6);
          F1@1;

  Model constraint:
           NEW (COMP_REL);
           COMP_REL = (P1+P2+P3)**2/((P1+P2+P3)**2+P4+P5+P6);

  Output: CINTERVAL;



INPUT READING TERMINATED NORMALLY



Reliability estimation after parceling, for composite with
categorical items (Raykov procedure)
England

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                        1516

Number of dependent variables                                    3
Number of independent variables                                  0
Number of continuous latent variables                            1

Observed dependent variables

  Continuous
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   NEW1        NEW2        NEW3

Continuous latent variables
   F1


Estimator                                                      MLR
Information matrix                                        OBSERVED
Maximum number of iterations                                  1000
Convergence criterion                                    0.500D-04
Maximum number of steepest descent iterations                   20
Maximum number of iterations for H1                           2000
Convergence criterion for H1                             0.100D-03

Input data file(s)
  EnglandParceling.dat

Input data format  FREE


SUMMARY OF DATA

     Number of missing data patterns             1


COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value   0.100


     PROPORTION OF DATA PRESENT


           Covariance Coverage
              NEW1          NEW2          NEW3
              ________      ________      ________
 NEW1           1.000
 NEW2           1.000         1.000
 NEW3           1.000         1.000         1.000



UNIVARIATE SAMPLE STATISTICS


     UNIVARIATE HIGHER-ORDER MOMENT DESCRIPTIVE STATISTICS

         Variable/         Mean/     Skewness/   Minimum/ % with
Percentiles
        Sample Size      Variance    Kurtosis    Maximum  Min/Max      20%/60%
 40%/80%    Median

     NEW1                 11.862      -0.730       4.000    5.01%      10.000
 12.000     12.000
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            1516.000       9.990       0.135      16.000   15.24%      13.000
 15.000
     NEW2                 11.543      -0.583       4.000    7.45%       9.000
 11.000     12.000
            1516.000      12.000      -0.356      16.000   18.07%      12.000
 15.000
     NEW3                 11.889      -0.746       4.000    7.78%       9.000
 12.000     12.000
            1516.000      12.471      -0.154      16.000   23.15%      13.000
 16.000


THE MODEL ESTIMATION TERMINATED NORMALLY



MODEL FIT INFORMATION

Number of Free Parameters                        9

Loglikelihood

          H0 Value                        -9860.920
          H0 Scaling Correction Factor      1.3556
            for MLR
          H1 Value                        -9860.920
          H1 Scaling Correction Factor      1.3556
            for MLR

Information Criteria

          Akaike (AIC)                    19739.839
          Bayesian (BIC)                  19787.754
          Sample-Size Adjusted BIC        19759.163
            (n* = (n + 2) / 24)

Chi-Square Test of Model Fit

          Value                              0.000*
          Degrees of Freedom                     0
          P-Value                           0.0000
          Scaling Correction Factor         1.0000
            for MLR

*   The chi-square value for MLM, MLMV, MLR, ULSMV, WLSM and WLSMV cannot be
used
    for chi-square difference testing in the regular way.  MLM, MLR and WLSM
    chi-square difference testing is described on the Mplus website.  MLMV,
WLSMV,
    and ULSMV difference testing is done using the DIFFTEST option.

RMSEA (Root Mean Square Error Of Approximation)

          Estimate                           0.000
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          90 Percent C.I.                     0.000  0.000
          Probability RMSEA <= .05            0.000

CFI/TLI

          CFI                                 1.000
          TLI                                 1.000

Chi-Square Test of Model Fit for the Baseline Model

          Value                            2003.628
          Degrees of Freedom                      3
          P-Value                            0.0000

SRMR (Standardized Root Mean Square Residual)

          Value                               0.000



MODEL RESULTS

                                                    Two-Tailed
                    Estimate       S.E.  Est./S.E.    P-Value

 F1       BY
    NEW1               2.809      0.069     40.738      0.000
    NEW2               3.287      0.063     52.392      0.000
    NEW3               3.264      0.070     46.769      0.000

 Intercepts
    NEW1              11.862      0.081    146.130      0.000
    NEW2              11.543      0.089    129.739      0.000
    NEW3              11.889      0.091    131.087      0.000

 Variances
    F1                 1.000      0.000    999.000    999.000

 Residual Variances
    NEW1               2.099      0.130     16.204      0.000
    NEW2               1.195      0.137      8.728      0.000
    NEW3               1.817      0.166     10.964      0.000

New/Additional Parameters
    COMP_REL           0.945      0.003    292.132      0.000


QUALITY OF NUMERICAL RESULTS

     Condition Number for the Information Matrix              0.281E-04
       (ratio of smallest to largest eigenvalue)


CONFIDENCE INTERVALS OF MODEL RESULTS
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                   Lower .5%  Lower 2.5%    Lower 5%    Estimate    Upper 5%
Upper 2.5%   Upper .5%

 F1       BY
    NEW1             2.631       2.674       2.696       2.809       2.923
2.944       2.987
    NEW2             3.126       3.164       3.184       3.287       3.390
3.410       3.449
    NEW3             3.084       3.127       3.149       3.264       3.379
3.401       3.444

 Intercepts
    NEW1            11.653      11.703      11.729      11.862      11.996
12.021      12.071
    NEW2            11.314      11.368      11.397      11.543      11.689
11.717      11.772
    NEW3            11.656      11.711      11.740      11.889      12.038
12.067      12.123

 Variances
    F1               1.000       1.000       1.000       1.000       1.000
1.000       1.000

 Residual Variances
    NEW1             1.765       1.845       1.886       2.099       2.312
2.352       2.432
    NEW2             0.842       0.927       0.970       1.195       1.420
1.463       1.548
    NEW3             1.390       1.492       1.544       1.817       2.090
2.142       2.244

New/Additional Parameters
    COMP_REL         0.937       0.939       0.940       0.945       0.950
0.951       0.953


DIAGRAM INFORMATION

  Use View Diagram under the Diagram menu in the Mplus Editor to view the
diagram.
  If running Mplus from the Mplus Diagrammer, the diagram opens automatically.

  Diagram output
    f:\learning mplus\bases de datos artículo\3_composite
reliability\cr_england.dgm

     Beginning Time:  14:51:11
        Ending Time:  14:51:11
       Elapsed Time:  00:00:00



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